

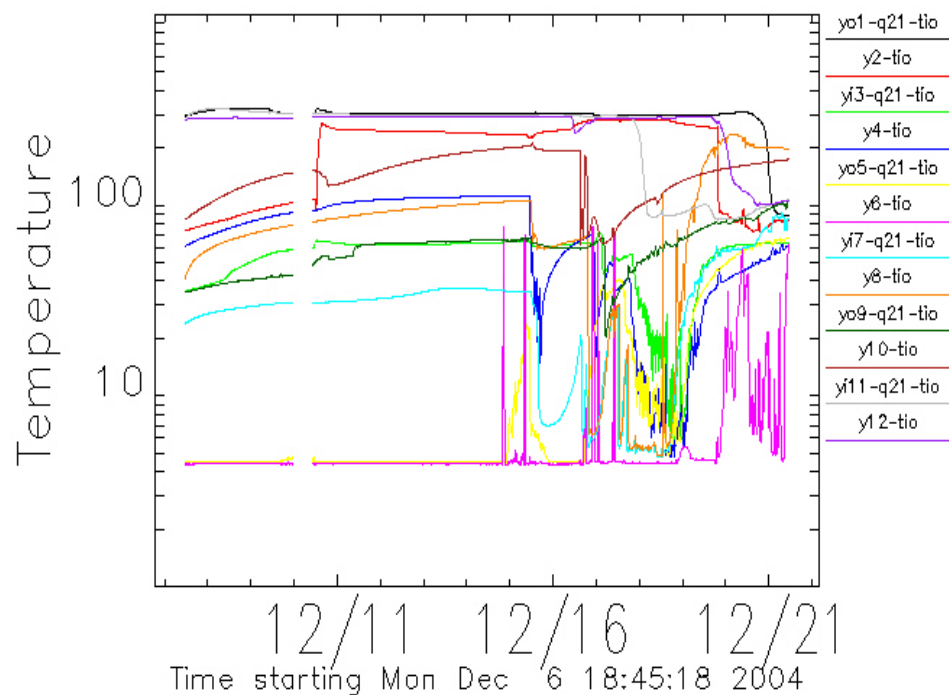
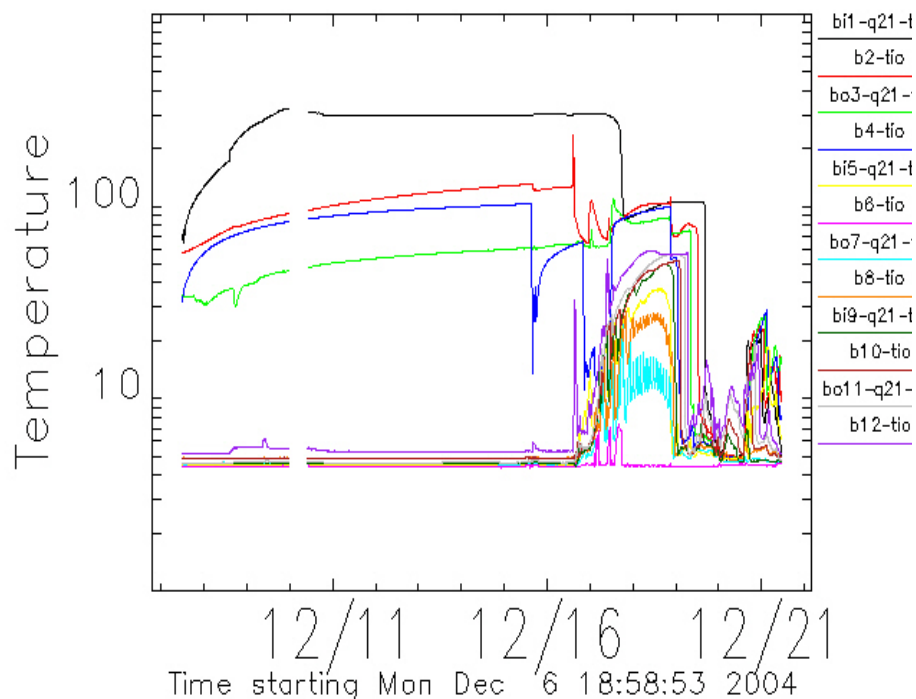


# Run-5 update

## Cryo

Blue: 4K wave → ring at operating conditions **tonight**

Yellow: 80K wave in progress, expected time for yellow at operating conditions **Sunday 26**





## Beam in blue/yellow

### BLUE

possible beam in **blue** Wednesday 22 night (50/50)  
or Thursday 23

Injectors: tandem/booster up, AGS coming up today  
PS/magnets high current tests tomorrow daytime

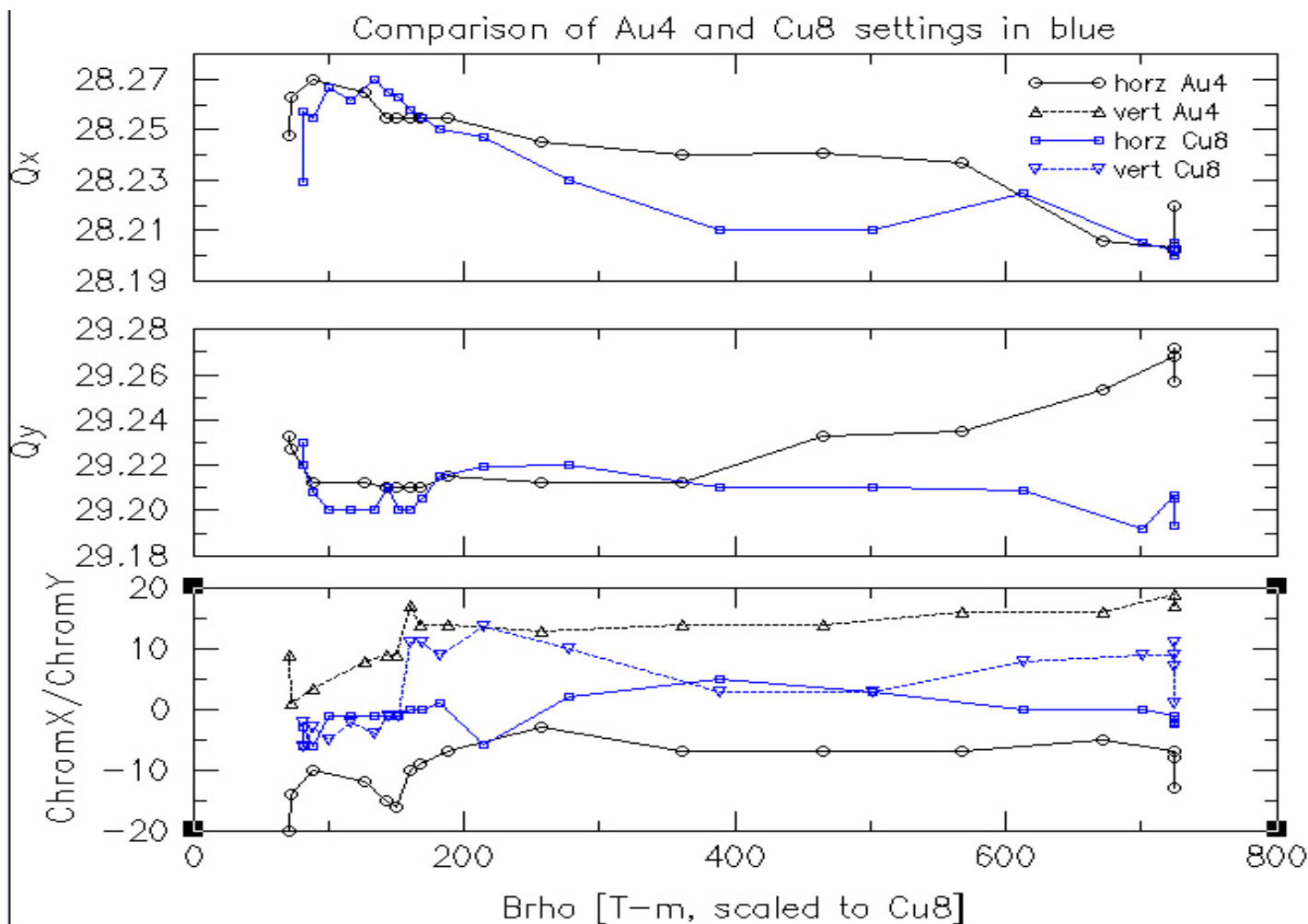
Beam: re-establish injection, instrumentation, RF,  
ramps to store in blue, improve set-up → increase  
intensity

### YELLOW

Ring cold december 26

PS/magnets testing, high current tests, 2 shifts  
dec 26-27 → beam earliest 26 or Monday 27

Beam: set-up injection, RF, instrumentation, ramps



Better tune and chromaticity predictions by model this year



# Initial prediction Cu8 yellow trims

(\*)  $Y(\text{Cu8}) = B(\text{Cu8}) + (Y(\text{Au4}) - B(\text{Au4}))$

Brho	B(Qx)	B(Qy)	B(Chrx)	B(Chry)	Y(Qx)	Y(Qy)	Y(Chrx)	Y(Chry)
81.1138	28.229	29.23	-6	-2	28.247	29.245	-8.4	1.3
81.4531	28.257	29.22	-3	-6	28.275	29.235	-5.4	-2.9
88.1242	28.255	29.208	-6	-3	28.273	29.221	-8	-2.5
99.4246	28.267	29.2	-1	-5	28.273	29.213	-2.1	-4.9
116.375	28.262	29.2	-1	-2	28.276	29.213	-0.8	-2.6
133.801	28.27	29.2	-1	-4	28.286	29.214	2.1	-5.8
144.396	28.265	29.21	-1	-1	28.287	29.225	5.2	-4.4
151.223	28.263	29.2	-1	-1	28.285	29.215	6	-6
160.875	28.258	29.2	0	11	28.280	29.215	6.8	5.5
168.527	28.255	29.205	0	11	28.277	29.225	5	10
182.064	28.25	29.215	1	9	28.275	29.223	7.4	7.3
213.684	28.2469	29.2191	-5.8	13.7	28.273	29.222	-0.7	12.8
277.301	28.23	29.22	2	10	28.255	29.225	5	11
389.128	28.21	29.21	5	3	28.229	29.217	12.3	4.3
500.954	28.21	29.21	3	3	28.228	29.215	8.9	5.5
612.781	28.225	29.209	0	8	28.241	29.223	1.1	13.0
701	28.205	29.192	0	9	28.224	29.215	-0.6	14.9
724.608	28.202	29.207	-1	9	28.211	29.250	-2	9.6
724.608	28.205	29.193	-1.5	11	28.214	29.236	-2.5	11.6
724.608	28.205	29.205	-2	7	28.214	29.248	-3	7.6
724.608	28.2	29.207	-2.5	1	28.209	29.250	-3.5	1.6

→ Implemented in ramp Cu8



## Miscellaneous notes

8:30 Run-5 meetings re-start tomorrow morning

Widen-up the pool of physicists supporting RHIC operations – motivation:

- ❑ Training for physicist shifts (→shortage for PP run)
- ❑ Support analysis
- ❑ (More effective teams for beam experiments later on)

.....the latest : the Cu28+ “beam”